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ABSTRACT

Previous research has indicated that depression, the most common psychological disorder experienced by over 19 million Americans, can be related to such factors as ethnicity, social support, social economic status, academic achievement and gender. One hundred and sixty students from Johnson C. Smith University and Tennessee State University were administered Beck Depression Inventory (BDI) and Social Provision Scale (SPS). One hundred and ten of these students were black, 50 were white; 96 were female, 64 were male. A stepwise multiple regression and independent t-test techniques were used for data analysis. The results showed that social support, social economic class, and grade point average were inversely and significantly related to depression level. No significant differences were identified in the depression scores between black and white or male and female. (Contains 18 references and 3 tables.) (Author)

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THE EFFECTS OF SOCIAL ECONOMIC STATUS, SOCIAL SUPPORT, GENDER, ETHNICITY AND GRADE POINT AVERAGE ON DEPRESSION AMONG COLLEGE STUDENTS

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The Effects of Social Economic Status, Social Support, Gender, Ethnicity and Grade Point Average on Depression among College Students

Previous research has indicated that depression, the most common psychological disorder experienced by over 19 million Americans, can be related to such factors as ethnicity, social support, social economic status, academic achievement and gender. 160 students from Johnson C. Smith University and Tennessee State University were administered Beck Depression Inventory (BDI) and Social Provision Scale (SPS). 110 (69%) of these students were black, 50 (31%) were white; 96 (60%) were female, 64 (40%) were male. A stepwise multiple regression and independent t-test techniques were used for data analysis. The results showed that social support, social economic class, and grade point average were inversely and significantly related to depression level. No significant differences were identified in the depression scores between black and white or male and female.

Studies have shown that depression is the most common psychological disorder experienced by most U.S. citizens and that more than 19 million Americans over the age of eighteen experience depressive illness. The National Institute of Mental Health (NIMH 2000) reports that not only is the incidence of depression growing among the middle age and elderly segment of the population, but also that depression is spreading into the

adolescents and young adults population. It is believed that depression affects more people than cancer, Aids, or coronary heart disease. The NIMH report (2000) also indicates that nearly two-thirds of those afflicted by depression do not receive proper treatment due to misdiagnosis, a misunderstanding of the conditions, or the patients' inability to seek help.

Stewart and Greenfeld (1989) have reported that depression can be linked to very serious physical and social dysfunction. It can cause body pains, poor health and more time in bed and can interfere with normal functioning at home, school and work. Depression as an impairment involves dysphoric feelings and can include such human symptoms as sadness, loss of interest or pleasure in once enjoyed activities, changes in appetite or weight, feeling of worthlessness or inappropriate guilt, recurrent thoughts of death or suicide and difficulty in concentrating or making decisions (Harrold 1989).

The dysfunction from depression and its effect on productivity should be of great interest to society. It is estimated that the annual cost of depression in the U.S. was about $43.7 billion in 1990. This cost represented $12 billion direct expense for diagnosing and treatment of depression and $32 billion indirect

cost resulting from absenteeism and in lost job productivity (Greenberg, Stiglin, Finkelstein, Berndt 1993). These estimates might have underestimated the true cost of depression as the cost of depression tend not to include students because they are regarded as not being in the labor force (Mintz et al., 1992).

Even though depression is widely experienced in the general population of the united states, the prevalence of this psychological disorder is believed to vary with the gender, social economic class, level of self-esteem, ethnicity and the level of social support experienced by the individual. Several studies have indicated that females have a higher incidence of depression than males (Moran and Eckenrode 1991; Kessler, et al., 1994; Allgood-Merton, et al. 1990). It is hypothesized that females are more prone to negative self assessment, likely to be less satisfied in marriage than men and that the changing role and status of female in the modern society have engendered strain among females (Angrist 1969; Gurin et al., 1960). Tashakkori and Thompson (1989) have found that low self-esteem is significantly related to depression and that the relationship is stronger among females than males.

Whether measured by income, occupation, educational attainment or a combination of these, it has been shown that the

impairment caused by depression is significantly higher among persons of lower socioeconomic status than among persons of higher economic class. Warheit et al. found that there is an inverse relationship between depression scores and the level of income. In their study of medical inpatients, they discovered that those patients with annual income of less than $ 3, 000 had a mean depression score of 23.4 compared to a score of 18.51 for individuals with annual income of between $3,000 and $5,000. This inverse relationship was also noted to be true for the index of socioeconomic status (SES). A mean depression index of 22.7 was reported for the lower SES, compared to a score of 12.8 for the highest SES. A number of other studies have confirmed this inverse relationship between SES and depression (Brown 1983; Lagner and Michael, 1963).

Even though recent consensus seems to be that there is no relationship between depression and ethnicity (Casper, Belanoff, and Offer, 1996; Lester and DeSimone, 1995), there are a number of studies in the literature that tend to refute this assertion. Biafora (1995) reported that blacks show significantly higher depressive index than whites. A study, undertaken by Sutker et al. (1995) to investigate differences in depression scores between minorities and

whites among military personal in combat duties, reports higher depression score for minorities than whites regardless of whether or not they were deployed to combat areas. It should be noted that that the largest proportion of minority participants in the study were blacks.

Another factor that has been cited in explaining depression and distress levels is the amount of social support received by an individual. Gottlieb(1994) defined social support as those helpful actions and verbalizations performed for an individual by significant others, and maintained that social support should be understood as an indicator of effectiveness of exchange between individuals and their social environment. Social support is often seen as a multidimensional construct which includes size of social network, emotional support, quality of social support, reciprocal support relationship with others and frequency of contact with members in the social group. Research has consistently shown that having others to turn to in time of need or to confide personal problems may moderate distress levels (House, 1981). It has been shown that social support and social network are dominant determinants of the physical and mental health, especially among the adolescents. Studies by Feiring and Lewis (1991) and Ystgaard

(1997) suggest that adolescents with high level of social support report better psychological health than those with lower levels.

The psychological health of college students from various ethnic groups has received renewed attention from the U.S. Department of Health and Human Services (Healthy People 2000) and a number of other researchers (Walden, 1994; Kagawa-Singer' 1996). In general, college students are believed to show a considerable degree of mental dysfunction. Arnstein (1985) and O'Malley el al. (1990) reported that the degree of psychopathology on college campuses has increased in recent years. This increased distress has been attributed to increase diversity in age, ethnic composition and gender of college students across campuses. This study examines the relationship between depressions, as measured by Beck's index, and income, gender, ethnicity, social support and grade point average among students on two college campuses in North Carolina and Tennessee. While the students enrolled at the college in North Carolina are predominantly black, the ones in Tennessee are diverse.

METHOD

Participants

The sample consisted of 160 undergraduate students from two universities in Tennessee and North Carolina. Of the 160 participants, 110(69%) were black, 50(31%) white; 96(60%) were female, 64(40%) male; 69(43%) had household income of less than $35, 000, 32(20%) had income of less than $50,000; 59(37%) had household income of over $50, 000; 105(66%) were between 17 and 22 years of age, 50(31%) were between 23 and 26 years; 5(3%) were above 22 years of age; 35(22%) were Freshmen, 52(33%) were Sophomores, 31(19%) were Junior and 42(26%) were Seniors. 101 (63%) of the students had grade point average of less than 2.6, while 59 (37%) had grade point average of 2.6 or higher.

INSTRUMENTS

The students were administered Beck Depression Inventory (BDI, Beck, 1967; Carson, 1986;Beck el al. 1988) which is a 21 question self-report survey intended to quantify the severity of depression. This index (BDI) is one of the most widely self-report instruments for measuring and uncovering the severity of

depression in the general population and among college students. A number of studies have indicated that BDI is a valid instrument for measuring depression among college students because the instrument correlates strongly (.77) with major psychiatric ratings for this population group (Bumberry el al., 1978). Since a BDI score of 0 to 9 is generally defined as absence of significant depression, we excluded students whose scores were 9 or below. BDI scores of 30 to 63 were regarded as an indication of severe depression, 17 to 29 as moderate, and 10 to 16 as mild.

Another instrument used for this study is the Social Provision Scale (SPS, Cutrona and Russell, 1987) which is composed of 24 items intended to measure the degree of social support received by respondents. Cutrona and Russell (1987) have shown that SPS, as a measurement of social support, is reliable and consistent with coefficients of .84 to .92 and .64 and .76 respectively. A stepwise regression analysis was executed using the depression scores as the criterion variable, and social support, social economic status, grade point average, gender and ethnicity as predictor variables.

RESULTS

The means, standard deviation and t scores for all variables are shown on table 1. The analyses yielded significant differences between the depression scores for lower and upper income class and lower and upper grade point average. The depression scores for male and female, black and white were not significantly different in this sample.

Table 2 illustrates the correlation matrix for all variables included in the regression analysis. Social support (r=-.50), social economic status (r=-.48), and grade point average are significantly and negatively correlated with depression; thus higher levels of social support, social economic class and grade point average are associated with lower depression scores. Gender and ethnicity are also related to social support while grade point average is associated with social economic class and social support.

Table 3 shows the summary of the stepwise regression results for all the variables that significantly explained changes in depression levels in the study. Social support, social economic status and grade point average were significant predictors of depression, $F(4, 139) = 43.9$, $p = .001$. Social economic class accounted for 31% of the variance in the depression scores. Social

support and grade point average respectively accounted for 14% and 7% of the variance in depression levels. Together, these three variables explained 52% of the changes in the depression scores.

Discussion

The results of this study support previous findings, which indicate that social support, and social economic status have inverse relationship with depression (Yst 1997, Feiring and Lewis 1991, Brown 1993, Lagner and Micheal 1993). Thus the study reaffirms the old known theory that income, relationships with family, friends and significant others continue to be a consistent measure of students' mental well being.

The inverse relationship between grade point average and depression observed in this study has not received a lot of attention in the literature. Since students with BDI of nine or less were excluded from the study, it means that the respondents in this study were depressive in one form or the other (mildly, moderately, severely). It is possible that the incidence of depression among these students has resulted in missed classes, personal problems and thus poor grade point average. Another explanation could be that students with poor grade point average, because of other reasons (work, family problems etc.) become distressed as they

ponder the effect of poor averages on their graduate school and job opportunities.

Contrary to the studies by Biafora (1995) and Sutler et al. (1995) which report higher depression scores for blacks than whites, this study like Casper, Belanoff and Offer (1996) finds no significant difference between the depression scores for black and white students. This study failed to report significant differences between the depression scores of male and female students as have been widely reported in the literature (Augrist 1969, Tashakori and Thompson 1989)

One limitation of this study was that college students constituted the whole sample, thus external validity could be called to question. Also, the use of self-report instruments to evaluate objective behavior could lead to cognitive distortion of the levels of social support and depression.

In spite of these limitations, the study identified the relationships between social support, social economic class and grade point average and depression among college students in the sample. The insignificant relationship between depression scores of black and white , male and female observed in this study could

lead to a new paradigm in the discussion of the mental health of young adult, especially those in college campuses.

Policy makers may want to know that economic well being, social support and academic achievements may be more important in explaining the psychological welfare of young people today than labels like black and white or male and female. In college campuses, as a way to handle the mental health of students, administrators may want to coordinate the financial, academic, health and counseling services in order to establish interactions among these services.

Table 1: Mean BDI Scores by Group

Group	N	MEAN	SD	t
All Sample	139	17.8	6.3	
Males	56	17.2	10.4	1.24
Females	83	18.5	11.2	
Blacks	95	220.1	12.7	1.44
White	44	18.93	10.2	
Less than $35,000	63	22.34	8.09	
Between $35,000 and $50,000	26	20.5	6.9	2.72*
Grade point average				
Less than 2.6	82	22.7	7.9	
More than 2.6	49	17.6	8.2	2.92*

Table 2: Correlation Matrix for Dependent and the Independent Variables for the Entire sample

Variable	1	2	3	4	5	6
1. Depression	1	.07	-.48	.039	-.5	-.39
2. Gender	.07	1	.18	-	.31	-
3. Eco. Class	-.48	-1	.18	.08	-	.23
4. Ethnicity	.039	-	-	1	.29	-
5. Social Support	-.5	.31	-	.29	1	.42
6. Grade point average	-.39	.01	-.23	.01	.42	1

Table 3: Summary of the Stepwise Multiple regression results with Depression as Criterion Variable and Gender, Ethnicity, Income Class, Social Support and grade point average as the Independent Variable

Independent Variables	R'2	R'2 (adjusted)
Social Economic Class	.31	.31
Social Support	.14	.45
Grade Point Average	.07	.52

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